

VIII. Trails and Open Space Element

The Trails and Open Space Element contains a summary of and selected update to the Trails and Open Space Master Plan of 2005. As a component of the Growth Management Master Plan, this element is integrated with closely aligned topics of transportation, land use, and economic development. It is not a complete replacement of the stand-alone master plan, which contains additional background and detailed design guidelines.

A. Introduction

The Gallup-McKinley Trails and Open Space Master Plan was prepared in 2005 to create a framework for the long-range planning of the trails and open space system. Construction of the High Desert Trail, over 20 miles in length, raised public awareness of trails and the many benefits that they provide to the community. The 2005 master plan, developed after the development of High Desert Trail, solidified trails development planning and created trails design guidelines. The Trails and Open Space Master Plan was created as a stand-alone plan, independent from the Growth Management Master Plan.

The Growth Management Master Plan Update incorporates an update of the Trails and Open Space Plan as an element in order to enhance the stature and feasibility of the master plan recommendations, as well as to better integrate trails and open space planning with the other elements of the Growth Management Master Plan.

The Trails and Open Space Element contains the system of existing and proposed trails in the 2005 plan as updated, policies organized to be consistent with other elements and an abbreviated version of the community vision and priorities. Additional open space venues have been added since 2005, and are also incorporated into this element. The 2008 Growth Management Master Plan Update provides additional information and recommendations regarding organizational options developed through discussions of the city's Trails and Open Space Committee.

Trail and open space design guidelines are contained in the 2005 Trails and Open Space Master Plan and have not been incorporated into the Growth Management Master Plan, since they are detailed implementation measures. The guidelines should be accessed in the Trails and Open Space Master Plan document and periodically updated. Other components of that master plan not included in the Growth Management Master Plan update may also be of particular interest to users of the plans, such as details about the community participation process and the economic analyses contained in the Appendix.

2008-2009 Planning Process

As part of this plan update, an outdoor recreation focus group was convened on April 23, 2009 to discuss different programs and program needs. Participants representing eight different initiatives provided information on recent activities and discussed mutual concerns. In addition, the city's Trails and Open Space Committee met on June 16 and August 20, 2008 to propose updates to the Trails and Open Space Element, including updating the capital improvements list. This element was also reviewed during the policy summit, the Planning and Zoning Commission public hearing, and the City Council public hearing for consideration of adoption of the plan.

B. Existing Conditions

Gallup has developed an unusually extensive collection of trails and open space systems for a community of its size. The Gallup area currently has approximately 35 miles of public trails across varying terrain and provides opportunities for mountain biking, hiking, running and walking. Other outdoor recreational areas include a rock climbing area, an outdoor shooting range, and an all-terrain vehicle park. In addition, the city of Gallup has a golf course, baseball sports complex, Red Rock Park arena, and various city parks throughout the community.

Trails

Following are the main trails within the system.

- **High Desert Trail.** The High Desert Trail was created through a series of efforts between 2002 and 2005. In 2002, the northwest area became available for new trail construction. Gamerco Associates, McKinley County, the city of Gallup, Northwest New Mexico Council of Governments, Adventure Gallup & Beyond, Gallup Trails (GT) 2010, and local ranchers formed a partnership to pursue the building of this trail. In 2003, the trail was laid out, easements were secured, and construction begun. Over 20 miles of trail have been created for mountain biking and hiking by members of the GT 2010, the Youth Conservation Corps (YCC) and the city of Gallup. The YCC has provided huge amounts of heavy labor, including the construction of retaining walls, switchbacks, cleared corridors and rock cairns. The city developed fenced parking areas at two trailheads, one located on Chino Road, off U.S. 491 and south of the community of Gamerco, and the other accessed by County Road 1, north of the Mentmore subdivision.

The High Desert Trail has become a major amenity for local residents as well as a facility for mountain bicycle races that have attracted many participants from out-of-town. Some of these events are the “Dawn to Dusk” endurance race and the “Squash Blossom Classic” that includes mountain bicycle races, a half marathon and a 12-kilometer run.

- **Pyramid Rock and Churchrock Trails/Red Rock Park.** Trails have been established in Red Rock Park, mainly traversing intricate red rock sandstone formations to Pyramid Rock and Churchrock. The magnificent park is one of the most popular attractions in the area, and hosts many events, including the notable Gallup Inter-Tribal Indian Ceremonial, Red Rock Balloon Rally, and Wrangler Rodeo. Recently, the park exchanged hands from the state of New Mexico to the city. Red Rock Park has an arena, convention center, museum, campground, and 700 horse stalls. In conjunction with horse accommodations in the park, a trailhead and equestrian trail have been identified for desired future development directly north of the park.
- **Rio Puerco Trail and Maloney Trail.** A primitive trail along the Rio Puerco will soon be completed extending from Allison Road west to meet the High Desert Trail at the Mentmore Trailhead. Future plans extend this trail farther west along the north bank of the Rio Puerco in conjunction with the Rio Puerco Restoration Project.

The Maloney Trail provides connectivity with the Rio Puerco Trail on the north side of Rio Puerco from Third Street east to Miyamura Street and west to Gamarco Wash. This trail provides opportunities for access from North Gallup to trails heading east and west. A bridge across the Gamarco Wash has allowed for the continuation of the Maloney/Rio Puerco Bicycle Path to the west, and an extension of the paved trail to the east of the Maloney realignment.

- **Stagecoach Neighborhood Trails.** The Stagecoach Neighborhood Association requested that the city and GT 2010 help develop trails in the open space to the east of the subdivision. Hiking and biking trails have been established. This area also has potential for bouldering in the white sandstone badlands formation.

View of area south of the Stagecoach neighborhood from near Mendoza Road



- **Safe Routes to School Urban Trail System.** The paved path along Boyd Avenue from JFK Middle School to Patton Drive was created through a city grant of \$600,000 from the New Mexico Department of Transportation and Federal Highway Administration.

Safe Routes to School (SRTS) has also built the following paths:

- Mendoza Boulevard to Gallup High School and Manuelito Middle School
- Black Diamond Canyon to Juan de Oñate Elementary School
- Rehoboth School to Vandenbosch and Indian Hills neighborhood
- Boyd Avenue from Boardman to Patton Drive

Additionally, SRTS plans to connect a path starting at the Aquatic Center on Boardman Drive, extending along the south and west edges of the City Golf Course, then along an easement for Plateau Drive, connecting to adjacent neighborhoods, and leading to the Medical Center and UNM-Gallup.

- **Scenic Byways Trail.** This recently completed urban trail extends from I-40 Exit 26 (East Exit) to Exit 22 (Miyamura Exit). It parallels E. 66 to the north of the highway.

Outdoor Recreational Areas

- **Mentmore Rock Climbing Area.** The city of Gallup purchased 70 acres north and west of the Mentmore subdivision in 2003 to form the inception of a potentially larger rock climbing area. The city constructed a fenced parking lot and has fenced the area. Local climbers have developed more than 50 bolted-to-rope climbs, over 30 of which are sport climbs. A larger potential open space area has been identified that may be leased or acquired in the future to add opportunities for more rock climbing and other activities.

*Rock with fixed
peton climbing
routes in the
Mentmore Rock
Climbing Area*



- **All-Terrain Vehicle (ATV)/Off Highway Vehicle (OHV) Park.** The ATV/OHV Park is on 300 acres of city-owned property near the North Hogback. The city has constructed a fence around the area. The volunteer ATV club Redrock Motorsports Club is expected to manage the facility and organize racing events once they have obtained 501 (c)3 status and entered into a joint powers agreement with the city of Gallup.
- **Outdoor Shooting Range.** The city is leasing 100 acres for 99 years from Gamera Associates for the shooting range located approximately three miles north of the Mentmore subdivision. In 2005, 400 individuals signed a petition to the city requesting a shooting range. McKinley County prepared the site. The city, as well as the state legislature, have helped support its development. Both local law enforcement officers and recreationists use the site.

Other Trails and Open Space Areas of Significance in the Area

A number of other outstanding trails are within the greater Gallup area, including:

- **Ancient Ways Art Trail,** Grants to Zuni to Gallup along NM Highway 53 and

NM Highway 602

- **McGaffey Area** of the Cibola National Forest is treasured by residents in the area for many outdoor recreational uses, including hiking, camping, hunting, and use on forest service roads for sightseeing and OHVs.
- **Gallup Waypoints** (a 60-page book describing 20 rides in the area)
- 20 fitness trails on school grounds of Gallup-McKinley Schools

The map on the following page shows the existing inventory of trails and open space areas along with City parks and Gallup-McKinley County schools within the city.

C. Issues and Opportunities

In formulating the 2005 plan, five community workshops were conducted in 2004-2005 to allow citizens to express their vision, priorities and concerns for the community trails and open space system. The vision and priorities are summarized below. Additional information is contained in the 2005 master plan and appendices.

Vision: What do you see in 2010 for Gallup's Trails and Open Space?

- Restored sections of the Rio Puerco will be accompanied by walking trails and tasteful signage.
- Biodiversity will be increased, brought about through multiple partnerships and volunteer groups' efforts.
- Safe routes will interconnect the entire city and be located away from vehicular traffic as much as possible. They will be accessible to pedestrians, cyclists, "wheelchairists," and especially as routes to school.
- Trails and open space are important components of a high quality of life, health, safety, and economic viability.
- The trail system includes connections through the urban environment of Gallup to outlying recreation trails and preserved open space.
- Gallup becomes a "model" for alternative transportation and an adventure tourism destination.

Priorities (listed from high-to-low order of ranking):

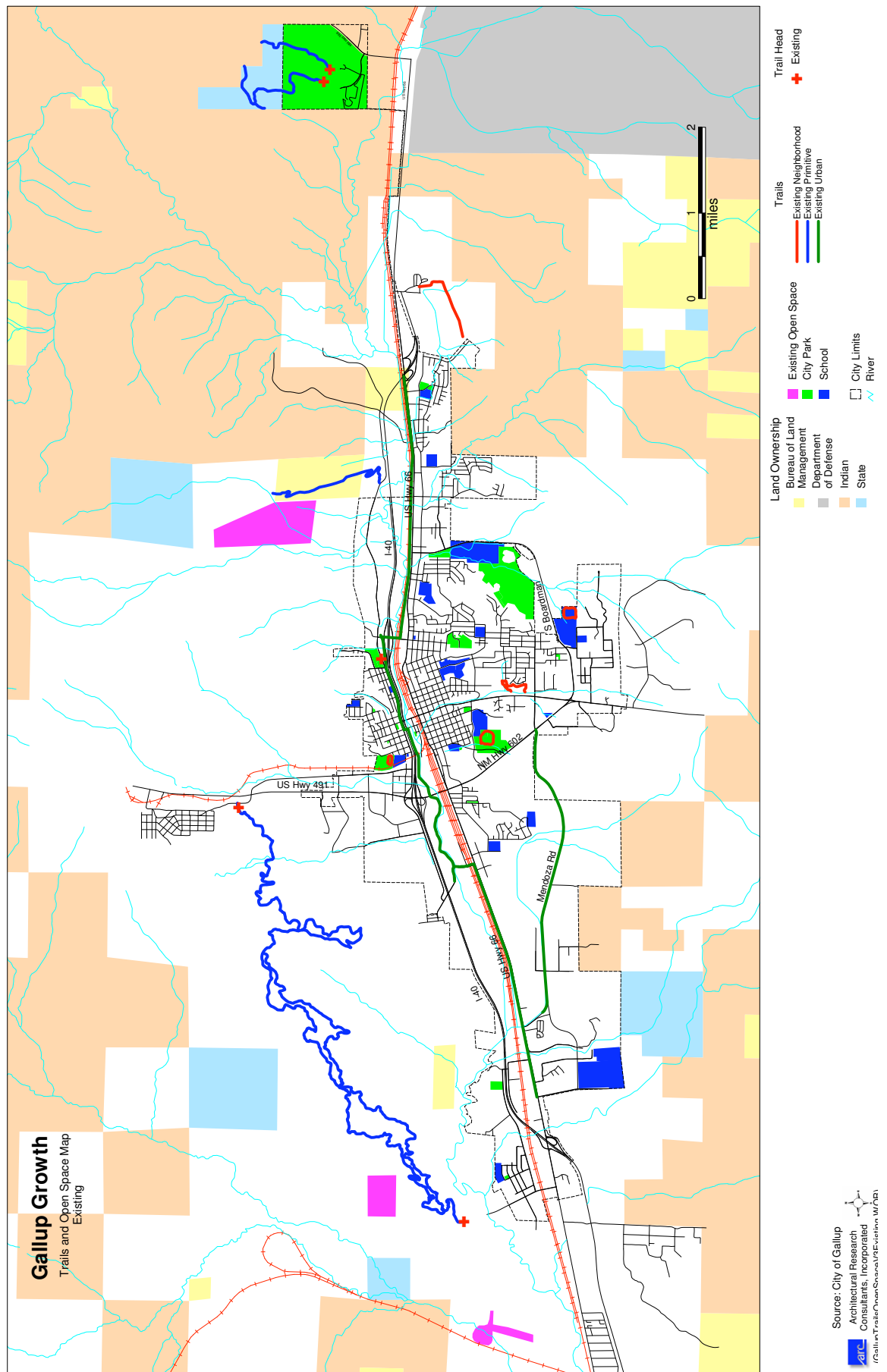
Where should Gallup's efforts focus for trails and open space development?

- Natural surface bicycle/walk trails
- Hard surfaced bicycle/walk trails around town
- Safe Routes to Schools
- River restoration/trails
- Single track bicycle/hike trails
- Fitness trails
- Bicycle paths separated from roadway

Which trails, pedestrian pathways or open space areas do you feel should be developed/improved first?

- Rio Puerco Pathway
- North side Trails
- Sports Complex Trail

Exhibit VIII-1
Map of Existing
Trails and
Open Space
System



- Safe Routes to Schools
- Maloney Pathway
- White Cliff/North Hogback Trails
- Hope Pathway
- Boyd Plateau Trail
- Rehoboth Red Mesa Trail
- Black Diamond Trail
- Churchrock Trail
- South Hogback Trail
- Golf Course Loop

Concerns and Values for Trails and Open Space

Extensive public involvement efforts were conducted as part of the 2005 trails and open space master plan process. Strong public support was expressed through eight focus group sessions, a survey included with city utility bills, and a telephone survey of residents. Of the telephone survey respondents, 90% supported the development of adventure tourism in Gallup. Nearly all of the telephone respondents supported additional recreational activities and events for local youth.

Top concerns expressed by the public that should guide the location, design and management of trails were the need to inform residents of the trail locations, location of trailheads in convenient places, safety, trash and broken glass on the trails, trails poorly marked, and public intoxication and panhandlers.

One of the issues explored in the 2005 Trails and Open Space Master Plan is whether the highest priorities are for recreationists or for transportation to school, work and shopping. Most of the survey respondents favored recreation enabled by inter-neighborhood connections to the regional system. More than three-fourths of the respondents would prefer to have trails in their neighborhood that interconnect with a larger Gallup trail system rather than short trails only within their neighborhood.

Strong needs were identified to provide more publicity and information to the public to attract use by local youth for fun and youth athletics, and encourage weight loss and exercise for health. The trails and open space system is seen to improve the quality of life in the community, and to contribute to building a stronger, more united community. There is a strong recognition of the importance of the trails and open space as an attraction to visitors, enhancing tourism and economic development. It is suggested that the trails provide an opportunity to revive the tradition of running in the Navajo culture.

The needs of elderly, disabled and those with diabetes should be considered in the trails design. Trails designed to serve those individuals should include:

- Benches and shaded rest areas en route
- Grab rails
- Paved and wheelchair accessibility
- Restrooms en route
- Trail width for two people to walk abreast

Trails designed for use by children should have water fountains and lighting improvements.

Trails should be strictly non-motorized. ATVs in particular must be prohibited on the trails. However, other areas should be designated especially for ATVs.

Securing Public Dedications and Easements for Trails and Open Space

In the early evolution of most trail systems, the majority of trails are informal or “unauthorized” in nature, having been developed by popular use over time. Many of the area trails are of this type, located both within the city, serving primarily pedestrians, and in the outlying areas, where they are used by hikers and mountain bicyclers. Informal trails used by the public that do not have legal easements or rights-of-way across properties are not identified as “existing” for public use in this plan.

Obtaining easements and dedications is an ongoing process needed to legitimize and protect selected informal trails and open space, and expand the system consistent with the Open Space and Trails Master Plan.

Concerns and Opportunities Discussed by the Outdoor Open Space Focus Group, April 2008

A focus group consisting of members of outdoor open space user groups was conducted on April 23, 2008 as part of the Growth Management Plan Update. Many of the points expressed during citizen input for the 2005 Trails and Open Space Master Plan were reaffirmed in this meeting. Progress was reported in the creation and maintenance of additional venues through energetic involvement of volunteers. Following is a summary of the focus group discussion:

Economic benefits of trails and open space to Gallup

- Gallup is one of the top ten destinations in New Mexico due in part to outdoor recreational opportunities.
- Lodging and restaurants benefit from trails and open space activities.
- Perhaps a lodger’s tax should be made available to support outdoor recreation development
- The city and county should consider a second quality of life tax to further support trails and open space development

Challenges to maintain trails, open space and parks

- Many city parks and recreation facilities, including the Sport Complex, are not adequately maintained. Long-term maintenance of trails and open space will require vigilance.
- “Groom Gallup” has been a successful initiative that builds pride in Gallup by maintaining the parks and public open spaces, weeding rights-of-way, sweeping sidewalks and streets, and other activities.

Additional trails and open space needs

- Equestrians need more trails/places to ride.

Initiatives of user groups to develop trails and open space

- The participants discussed their initiatives to create “new venues,” including the ATV/OHV Park, outdoor shooting range, and the High Desert Trail. The following steps were generally followed:
 - Projects were initiated by the user group.
 - The group worked with Gamarco Associates or other land owners to lease land and possibly arrange for contributions of services.
 - The trail or site development required coordination with city and county for selected services and/or contributions; however, the efforts were largely independent.
 - The user groups attempt to attend to ongoing maintenance and any patrolling of trails and sites through self-sufficient efforts, including events sponsorship, membership or users fees, and contributions.
- Participants acknowledged that getting together representatives in the same room to discuss mutual concerns is very important.
 - The participants would like to meet periodically.
 - A suggestion was made that the city parks director attend.

Advertising and Promotion of Gallup Trails, Open Space and Other Amenities

Trails and open space areas can only contribute to economic development if visitors and prospective visitors are aware of these attractions. Promotional literature published by the city of Gallup and New Mexico Department of Tourism, such as the *Gallup Visitors Guide*, regularly include information about trails and open space. Maps and guides are available in the Gallup Visitors Center.

The Gallup trails are lauded on some of the Web sites and Internet chat sites dedicated to mountain biking. This form of communication attracts locals and tourists to both competition events and self-guided tours. However, the coverage of local trails and open space venues in general promotional literature and Web site information is sometimes missing or incomplete. Consistent, informative coverage is needed in the city, Chamber of Commerce, and New Mexico Department of Tourism promotional publications and Web sites. National Web site articles and maps of mountain biking, hiking and OHV areas should also be further targeted for including up-to-date information about the Gallup area’s outdoor recreational assets.

Maps should be kept up to date, showing trails and providing directions to trailheads and open space areas, including both local venues around Gallup and National Forest venues in the McGaffey area. Printed copies of these maps should be available at various locations frequented by tourists or recreationists, and in electronic PDF file format on the city and other Web sites. Since the city cannot commit to maintaining maps of the National Forest and venues in the McGaffey area, it is recommended that maps for areas outside the city limits be maintained and provided through a partnership with McKinley County or other agencies. Additional grants may be available to assist the county in this activity.

Organizational Options for Trails and Open Space Planning, Funding, Development and Management

The “bottom-up” volunteerism and strategic use of city, county, and other governmental resources and services have been an effective organizational model for developing trails and open space in and around Gallup. User groups with regular and periodic support from the city, county, NWNMCOG, landowners such as Gameraco, and other groups have been able to create a remarkable set of trails and open spaces. Passion, creativity and civic energy of advocates have characterized trails and open space development thus far.

The city’s Trails and Open Space Committee planned and coordinated trails and open space developments with the city, county, Council of Governments, and community organizations. Planning services, consisting of staff support of the Trails and Open Space Committee, grant writing and grant administration, have been mostly provided by the city of Gallup. Periodic meetings of user groups, such as the April, 2008 focus group meeting, should be conducted to engage a larger group of highly interested residents to share information and plan collaborative activities.

At this time, the current “bottom-up” model should continue to be used for maintenance, event organization, fundraising and expansions. At some time in the near future, a more formal governing structure is needed. The size and cumulative value of the trails and open space system, funding requirements, need for a higher level of staffing, and higher maintenance have created the need for a new level of trails and open space organization.

One option for a trails and open space organization is for a local government agency (e.g., the city, county or a new Gallup-area regional entity) taking lead responsibilities. Such an entity might consist of a director/ planner, grant writer and maintenance staff. Examples include the Santa Fe County Open Space and Trails Program, City of Albuquerque Open Space Division within the Parks and Recreation Department, Bernalillo County Parks and Open Space, and the City of Durango open space area preserves within the Parks and Recreation Department.

A private, non-profit umbrella group might also become the lead trails and open space organization. For example, the Doña Ana County Wilderness Coalition is an advocacy group with goals to designate Bureau of Land Management (BLM) wilderness areas, create a national conservation area, and avoid land sales in wilderness areas. This coalition might have ongoing responsibilities if they are successful in forming the desired wilderness areas.

California’s Santa Clara County Open Space Authority is an example of a statutorily authorized independent, countywide agency. The California State Legislature passed enabling legislation for the Authority to administer programs, impose a special tax, and receive properties through gift, exchange, and purchase. The Authority is even allowed to exercise eminent domain to take certain properties contiguous to public property, a power not likely to be conferred on open space group in New Mexico.

Since the city's Trails and Open Space Committee has been established and staffed by the city, an attractive option is for the city to play a major ongoing role in leading an organization, with support and cooperative efforts from McKinley County and other entities. Roles of the different parties need to be clarified and established. The city of Gallup and McKinley County should explore establishing a joint powers agreement for acquisition, development, operations and maintenance of trails and open space areas.

D. Future Trails and Open Space System

Guiding Principles on Trails and Open Space

The following principles were derived from the 2005 community participation process and set the benchmark for Gallup's trails and open space planning. It is the city's intent that these principles are adhered to in all land use and amenity development decisions.

Open Space

1. Open space will be naturalistic, undeveloped and set aside in addition to active park and recreation facilities. Open space may be privately or publicly owned, provided open space guiding principles are met.
2. An interconnected system of open space will be conserved within areas of Gallup and surrounding McKinley County, Indian lands, and other jurisdictional lands.
3. Open space corridors will be continuous, of adequate width, and interconnected to accommodate the movement of wildlife and create a sense of separation from adjacent urban uses.
4. Special open space areas and corridors such as the Rio Puerco floodplain, ponds and wetlands will have a re-vegetated buffer (within the designated open space) on each side, of sufficient width to protect visual, water quality and wildlife integrity.
5. Mountain and rangeland vistas that are viewed from roadways, trails and parks should be protected through visual analysis of future developments and guidelines for building color, height, roof material, and landscaping.
6. Adequate open space will be set aside along drainageways to naturally contain a 100-year flood.
7. Open space will be used as a way to store and convey stormwater as an alternative to channelization and hard structures.
8. Archeological resources in open spaces will be protected by avoiding activity in and near such resources and/or by signs or fencing to prevent public intrusion.
9. Lands that are designated as environmentally sensitive within an open space area will be posted or fenced to prohibit motorized vehicular activity or use of firearms that could impact such areas.

Trails and Pathways

1. There will be an integrated network of multiuse trails readily accessible from neighborhoods, schools, businesses, activity centers, and transportation systems, regardless of income, age, physical ability, or location in the town.
2. All trails will be designed and built to state-of-the-art design guidelines

appropriate to the types of trail uses, with attractive fixtures and furnishings and an integrated information/interpretive system.

3. Trails will run through pleasant settings offering a variety of experiences as well as connecting to places of interest such as historic sites, parks, waterways, and wildlife areas.
4. There will be a variety of trail lengths, including both short and long trail loops that provide a range of trail experiences from a 20-minute workout to a day-long outing.
5. Wherever feasible, trails should be grade-separated from street traffic, including use of safe underpasses and overpasses traversing highways and other high traffic routes.
6. No home will be more than 10 minutes from a multiuse trail, with safe on-street bicycle and sidewalk connections to trails.
7. The trail network system will tie into the city and regional trails.
8. There will be an on-street bicycleway and sidewalk system that ties to the trail network.
9. Trails and trail facilities will not adversely impact or be adversely impacted by homes, places of business, roads or the natural environment.
10. Where appropriate, trails may serve multiple objectives such as drainageway maintenance roads and non-motorized transportation.
11. The trail system will be properly designed and adequate to avoid user conflict and overcrowding.
12. Trails will be safe and affordable to build and maintain.
13. Unexcavated, unstabilized and unprotected archeological resources in or near trail corridors will be protected by routing a trail away from such resources and/or by signs or fencing to prevent public intrusion.

Existing and Proposed Trails by Type

Three trail/pathway classifications have been designated for proposed for development in the Gallup area. These are *primitive* trails, *neighborhood* trails, and *urban* trails. Within the urban trail classification is an additional category of *Safe Routes to Schools*. These trail/pathway classifications are described below.

Primitive Trails

Primitive trails are back-country routes located on Gallup's open space properties. Trails are regulated as "closed unless open." Trailhead signage will indicate which uses are allowed. For example, equestrian use may not be appropriate on some open space trails, and motorized use may only be allowed on others. Gallup's trails and open space program, with input from the citizen's trails advisory committee, will determine appropriate types of uses.

Primitive trails are designed to be sustainable, that is, they support current and future use with minimal impact to the area's natural systems. The Gallup trails program has adopted multiuse trail standards from the International Mountain Bicycling Association for all primitive open space area trails. According to the National Park Service, "sustainable trails" are those that:

- Support current and future uses with minimal impacts to the area's natural systems

- Produce negligible soil loss, while allowing vegetation to inhabit the area
- Do not adversely affect the area's wildlife population or habitat
- Accommodate pruning and plant removal that may be necessary for proper maintenance
- Accommodate existing uses, and monitoring and planning for appropriate future uses
- Require little re-routing and minimal long-term maintenance.

Sustainable trail systems contain several key features:

- Plan for drainage
- Contour with the terrain
- Avoid fall-line routes
- Full bench tread, using no fill on the out-slope

Equestrian Trails and Routes

Equestrian trails are designated for horse riders. Similar to primitive trails, other non-vehicular users, such as hikers and mountain bicyclers, may be allowed; however, equestrians have priority use, which may entail other users vacating the trail in order not to “spook” or slow down horses.

No formal equestrian trails have been established thus far. A need has been identified for an equestrian trail extending west from Red Rock Park through the wastewater treatment plant. Benefits of this trail include: recreational opportunities for local and visiting equestrians, exercise for horses in rodeos, access to the shooting range, and competitions associated with rodeos and the shooting range. This trail would tie into existing equestrian amenities at Red Rock Park (i.e., horse stalls), used by out-of-town visitors as well as locals.

The “sustainable trails” principles for primitive trails, described in the Trails and Open Space Master Plan trails guidelines, should apply to equestrian trails. Flexibility is needed in the primitive trails guidelines for equestrian trails that cross roads.

“Equestrian routes” may be designated on or next to lightly traveled dirt roads and shared with motorists. Any road designated as an equestrian route should be free of obstacles to horses, as well as grazing cattle, sheep and other livestock. While it is not desirable to mix motorist and horses, in many cases rural roads are the most accessible locations to provide for equestrian travel.

Neighborhood Trails

Neighborhood trails are those linear corridors that are confined within a neighborhood. These routes may cut across fields, travel along arroyos and other drainages, utility easements, and low-traffic road rights-of-way. They can connect housing to schools and other community facilities, local stores, transit stops, and may lead to nearby public open space. Neighborhood trails should be documented and protected through easements. Future development projects should accommodate established neighborhood trails.

Neighborhood trails may or may not be connected to the broader Gallup trails system. Individual neighborhood associations would have a voice in determining how neighborhood trails interact with the urban trails.

Surfacing on neighborhood trails may be natural or crushed aggregate. Safe passage is the priority of these trails. Neighborhood trails are non-motorized.

Urban Trails

Urban trails are the primary trails throughout the Gallup area. Trail widths and corridor rights-of-way may vary, depending on location, terrain, and predicted use. High-use trails should be at least 12 feet wide, with 2 to 3 feet of shoulder on each side. Connector trails can be constructed to lesser widths, 8 to 10 feet. Trail planners should anticipate use in determining widths. Heavy stroller use or in-line skating require a wider trail surface.

The urban trails system is strictly non-motorized. Motorized scooters, mini-motorcycles and Segways are prohibited. Motorized wheelchairs are exempt from this regulation. Whenever feasible, urban trails will comply with the Americans with Disabilities Act. American Association of State Highway and Transportation Officials (AASHTO) guidelines apply to Gallup urban trails.

Safe Routes to Schools

Background

Safe Routes to Schools (SRTS) was developed in Denmark in the 1970s due to a high number of child pedestrian fatalities, spread to the United Kingdom and Canada, then to the United States in the late 1990s. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), passed by Congress in 2005, established a federally funded SRTS program.

In the U.S., fewer children are walking and biking than in the past. While in 1960, approximately half of students walked or bicycled to school, in 2001, less than 15% walked or bicycled. Obesity has been increasing in the U.S. and childhood obesity is of special concern. It could lead to today's children becoming the first generation to have shorter life expectancies than their parents.

Siting schools on large tracts on the outskirts of communities and school consolidations that lengthen the trip between home and school have led, in part, to the decline in walking and biking to school. As well, traffic danger, adverse weather, and fear of crime have also contributed to the decline in walking and biking to school.

The SAFETEA-LU program for Safe Routes to Schools authorized \$612 million to be spent over five years. The program is administered by the U.S. Department of Transportation through New Mexico Departments of Transportation, and can be used for infrastructure projects as well as non-infrastructure activities. New Mexico is receiving approximately \$1 million per year through fiscal year 2009. Applications for \$15,000 grants for development of SRTS Action Plans and up to \$250,000 for implementation are available on a competitive basis. The city of

Gallup is a recipient of a grant to prepare a SRTS action plan.

Infrastructure projects are eligible for SRTS funding (in the range of 70% to 90% of a construction grant amount) include: sidewalk improvements, traffic calming and speed reduction improvements, pedestrian and bicycle crossings improvements, on-street bicycle facilities, off-street bicycle and pedestrian facilities, secure bicycle parking facilities, and traffic diversion improvements. Non-infrastructure activities (in the range of 10-30% of a construction grant amount) may include: public awareness campaigns, outreach to the press and community leaders, traffic education and enforcement, student sessions on pedestrian and bicycle safety, health and environment, and funding for training, volunteers and managers of SRTS programs.

The SRTS program is a collaborative effort between schools, parents and the city to improve safety conditions for children's ability to walk or bicycle to school. One focus is the development a Safe Routes to School Improvement Plan. The SRTS will identify a focused area surrounding the schools, mapping the routes that children currently take to school, suggest safer routes when necessary, and recommend improvements. Working with local government staff, a SRTS Improvement Plan should address such safety issues as speeding cars, dangerous intersections, and missing or ineffective crosswalks, sidewalks, and bicycle lanes.

Techniques for Improving SRTS

Traffic Calming

According to the Institute of Transportation Engineers, "Traffic calming is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users." When properly designed, traffic calming balances the needs of all street users: drivers, bicyclists, pedestrians and others, helping to restore safety and peace in neighborhoods that have been overwhelmed by speeding and/or cut-through traffic. Many traffic-calming enhancements have the added benefit of providing attractive landscaping for the street, and establishing a greater sense of place, which entices residents to spend more time outside enjoying their neighborhood. Most traffic calming initiatives focus on reducing the volume or speed of cars, either by changing the roadbed by raising it with humps or tables, narrowing travel lanes, reducing the number of travel lanes, or by forcing the cars to maneuver around circles or curves that block the long view of the road ahead. Some of these devices, such as traffic circles, have the added benefit of reducing some types of collisions on roads that were previously traveled at higher speeds.

Crossings

Marked crossings can identify the best places to cross a street. Clearly marked crosswalks, signage, special lighting, and raised crosswalks alert motorists to pedestrian activity and increase the likelihood that drivers will yield. Typically, zebra-style or ladder-crossing designs are used for streets with higher traffic volumes, while simpler parallel lines are used for lower volume streets. Most engineers prefer to maximize the use of existing crossings and to minimize duplicate crossings. It is equally important to consider current usage and identify logical crossing needs. Mid-block crossings, while not encouraged by traffic

engineers, are often used on school routes where large numbers of children must cross a street. If there are inadequate gaps in the traffic, (one gap per minute, on average), a pedestrian-actuated signal and/or a center island refuge area can be installed. Given that signals only operate for foot traffic, they do not cause undue delay to vehicles during periods of low pedestrian use. Center refuge islands are often more successful on some streets because pedestrians can cross the street in two stages and are not delayed by the traffic signal. Some other techniques include reducing the crossing distance through curb extensions and creating more visibility through raised crosswalks.

Signals

Traffic signals can be timed to remove the conflict between pedestrians and traffic. A split for the left turn onto the side street stops everyone, including pedestrians in the crosswalk. Each mode has special signals — bicycles, pedestrians and traffic. The bicycle signal is a standard signal, but it shows a bicycle icon instead of a disc shape. Bicycles proceed on the green bicycle icon while motorists see a red light. The pedestrian signal lasts longer than the other two, giving pedestrians the extra time needed to cross the road.

Bridges

Grade-separated pedestrian overpasses are installed when it is necessary to physically separate heavy pedestrian traffic from roadways or railroad tracks with steady motor vehicle traffic. While often considered prohibitively expensive, ingenuity can sometimes greatly reduce the cost.

Based on hazard areas, topography, and land status, an evaluation identified existing streets that currently serve or could serve in the future as collector pedestrian and bicyclist accesses to the public schools. The following streets have a high potential to be designated as SRTS corridors:

- Green Street
- Boyd/Plateau Avenue
- Boardman Street (shown as an urban trail)
- Grandview/Kit Carson and Phillipina
- Black Diamond Neighborhood Trail

These routes (with the exception of Black Diamond) should incorporate the following improvements to ensure their safety and accessibility for school youth:

- Continuous sidewalks
- Ramped curbs at intersections
- Bicycle lane striping on the street
- Striped crossings or raised pedestrian tables at intersections
- On-street parking bulb-outs to reduce walking distances at intersections
- Trails and shortcuts separated from roadways
- 4-way stop signs at intersections
- Mid-block crossings (with pedestrian-activated lighting, where appropriate) at school locations and on major streets.

Future Trails and Open Space Master Plan

The maps on the following pages show the overall existing and proposed future trails and open space system. The smaller area maps provide more detailed views of trails and open space in the neighborhoods and districts of the city.

Exhibit VIII-2
Map of Future
Trails and
Open Space
System

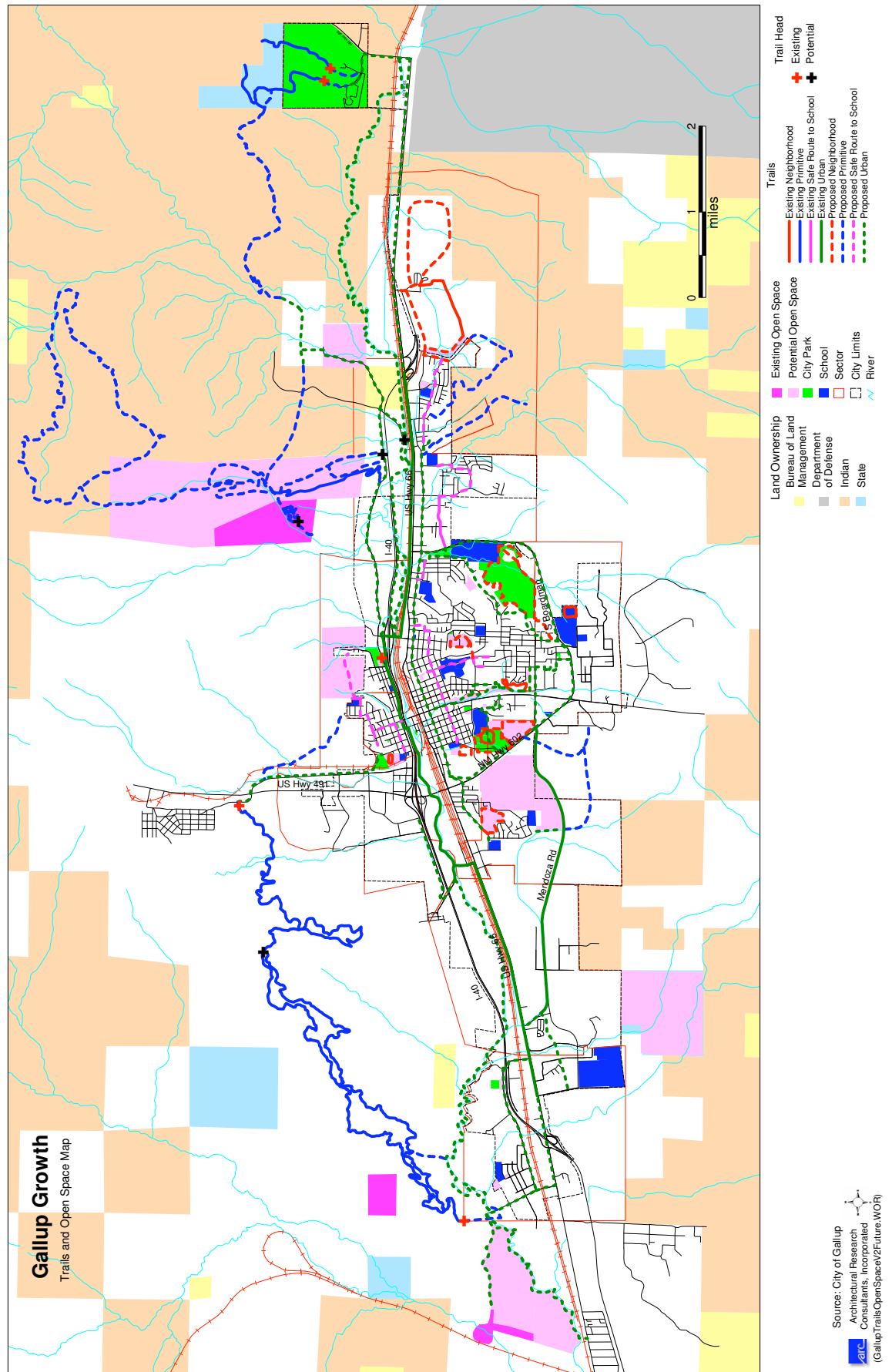


Exhibit VIII-3
Detail of Trails and Open Space on West Side of Gallup

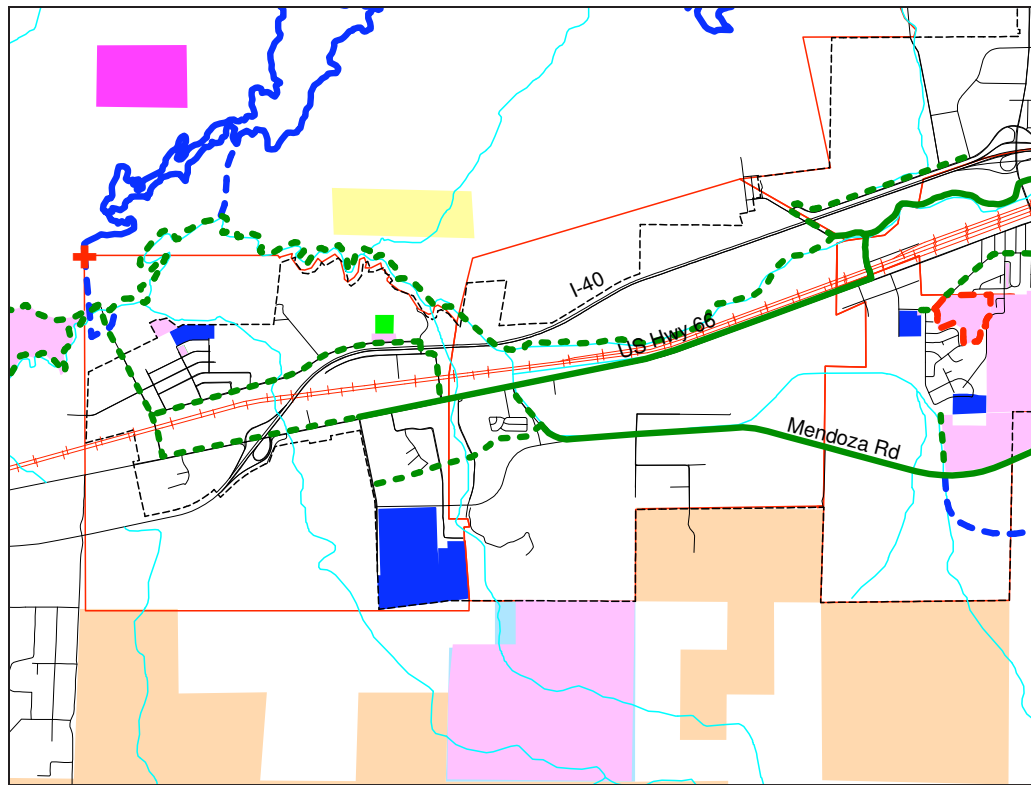
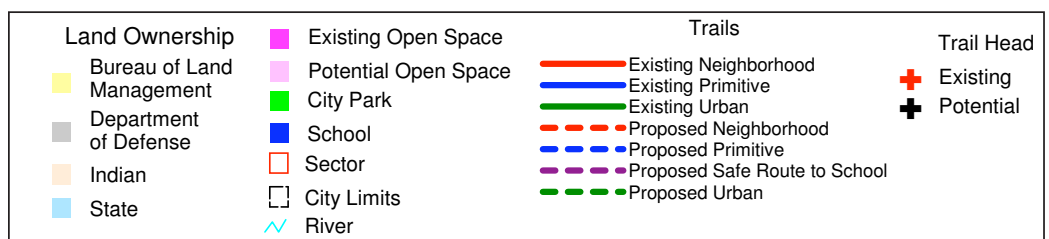
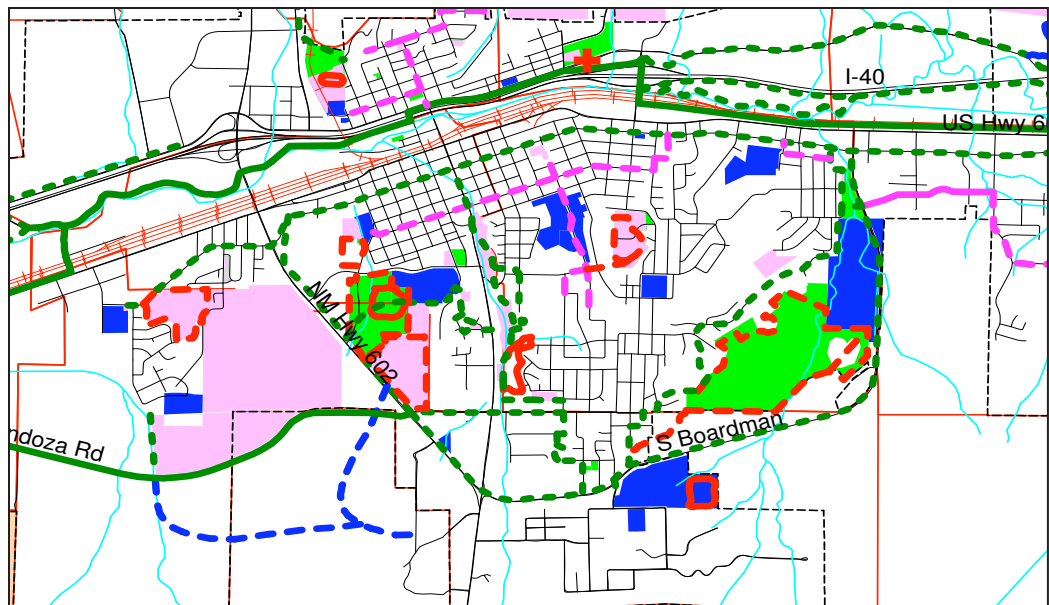


Exhibit VIII-4
Detail of Trails and Open Space in Central Gallup



Funding Sources

A number of funding sources are available from federal, state, local and other agencies for trails and open space. The city can help finance land acquisitions and easements through determining which organizations may serve as funding partners. Some potential funding partners are state or federal agencies, foundations, land trusts, other local governments and conservation groups. It is important to note that these partnerships and additional funding sources often come with restrictions and the city should research and determine whether these restrictions are acceptable. The following list is not intended to be comprehensive, but to provide a short list of some potential sources.

- Land and Water Conservation Fund (LWCF)
- North American Wetlands Conservation Fund
- National Fish and Wildlife Foundation Challenge grants
- Transportation Enhancement Act funds
- National Scenic Byways Program
- Rivers, Trails, and Conservation Assistance (RTCA) Program
- Local funding
 - Bond Issue
 - Development impact fees
- Private sector grants
- Philanthropic funds
- Corporate contributions
- Entrepreneurial partnerships
- Federal policies and regulations
- U.S. Department of Agriculture
- McKinley Soil and Water Conservation District

In addition, the city and county have opportunities to use regulations to help protect, designate or acquire trail corridors. Some of the potential regulatory tools are listed below:

- Local policies and regulatory measures
 - Subdivision regulations
 - Floodplain ordinances
 - Buffer zones
 - Conservation subdivision techniques
 - Watershed protection and storm drainage impact fees
 - Dedication/density transfers
 - Condemnation

Partnerships

Partnerships with other government agencies, non-profit organizations and private sector entities are essential to the implementation, management and maintenance of the Gallup trails and open space system. A few of the key partnerships necessary to move the Gallup Trails and Open Space Plan forward include, but are not limited to:

- **City of Gallup** - the city plays a central role in the planning, funding and coordination of trails and open space development.
- **McKinley County** - the assistance and collaborative effort that has been

established with the county will be important to maintain as the plan progresses. This assistance can continue in areas such as staffing, GIS and property data.

- **Northwest NM Council of Governments** - this established relationship will continue to serve the city through technical and economic development assistance.
- **NPS Rivers, Trails, and Conservation Assistance Program** - maintaining and strengthening the invaluable assistance and expertise available from this organization will be crucial as plan implementation moves forward.
- **Gallup Trails 2010** - will continue to be a strong advocacy group that can play a large role in the management and maintenance of the trails and open space program.
- **Youth Conservation Corps** - this organization will continue to play a significant role in the construction of primitive trails and open space restoration, and will be important for the realization of the ambitious trails network, as proposed.
- **Open Space and Urban Trails Citizens Advisory Committee** - the formation of this committee will be important to the essential link between community citizens and city government. The direction from this committee on priorities, education and management will increase over time as the plan is implemented.
- **Adopt-a-Trail-Program** - the creation of a program in which neighborhood associations, businesses, or organizations can adopt trails as their own will be important for maintenance and safety. Recognition of these groups through signage or in brochures will show community support and education for the trails program.
- **Adventure Gallup and Beyond** - will focus on marketing and promotion of Gallup's outdoor recreational opportunities.
- **McKinley Soil and Water Conservation District** - will continue to fund and create restored riparian corridors to parallel and enhance trails and open space.
- **Navajo Nation and Chapters of the Navajo Nation** - future collaboration is possible to connect trails to serve neighboring communities or major destinations such as the Fire Rock Casino.
- **Bureau of Land Management** - future trail corridors or open space may be proposed through nearby tracts managed by BLM.
- **U.S. Forest Service** - future trail corridors may be proposed to connect to U.S. Forest Service. Local groups are involved in the development of trails in the national forest, which contribute to the overall trails network in the area.

Trail Distances

Based on the proposed trail plan, the following table shows the mileages of existing and proposed trails, with a breakdown of the respective mileage for each of the trail classifications.

Exhibit VIII-7
Trail Plan
Distances

Trail Plan Distances					
	Urban	Neighborhood	Primitive	SR2S	Total Miles
Existing Trails	2	2	27	0	31
Proposed Trails	66	12	33	8	119
Total Miles	68	14	60	8	150

Trail Construction Cost Estimates

Trail construction costs are provided for three of the trail classifications (*urban*, *neighborhood* and *primitive*) as a range based on linear feet (LF) of trail. These costs include the described assumptions, but do not include right-of-way acquisition. Due to the wide variability in street improvement costs for Safe Routes to School improvements, it is not possible to assign a linear foot cost to this classification.

- Urban trails: \$10 to \$80/linear foot (LF) - assumes a 10' to 12' paved width; moderate to extensive earthwork/grading and landscaping (3 trees/100' LF) with irrigation.
- Neighborhood trails: \$5 to \$20/LF - assumes a 8' to 10' width, surfaced with crusher fines; light to moderate earthwork.
- Primitive trails: \$3 to \$10/LF - assumes a 4' to 6' graded surface only; minimal earthwork.

Additional improvements: safety railings are estimated to cost \$20/LF and prefab footbridges to cost \$1,500/LF.

Priority Trails Development Plan

Given that the proposed trail system will require a 10- to 20-year period to achieve full build-out, the following table identifies a five-year trail and open space phasing plan of priorities with cost estimates for each recommended trail.

The priority list is intended to provide a logical sequence to trail development starting in 2009, but the city should be flexible and prepared to respond to opportunities that may arise for trail acquisition or development that may not be identified.

The partnership framework and variety of financing and in-kind service options for new trail development and trail maintenance result in some uncertainties in the timing for implementation. Consequently, the city cannot alone commit to the funding expenditures and the timing proposed for the coordinated multi-party program.

Exhibit VIII-8
Five-Year Trails
Priority/Phasing
Plan

Five Year Trails and Open Space Priority/Phasing: 2010-2014

Year		Trail/Open Space	Jurisdiction	Ownership	Classification	Length (LF)	Cost Range/LF	Construction Cost Range	
2010		Trail Maintenance and Repair	City/County	City					\$50,000/year
2010	1	Highway 66 Bikeway Phase II (West)	City	City	Urban	21,120	\$10-\$80	\$211,200	\$1,689,600
2010	2	Little Rio Puerco Wash (Hope Trail)	City	City	Urban/SRTS	6,000	\$10-\$80	\$60,000	\$480,000
2010	3	ATV/OHV access road	City	City	Open Space	52,800	\$1-\$8	\$52,800	\$422,400
2010	4	ATV/OHV Ph II	City	City	Open Space			\$250,000	\$750,000
TOTAL 2010						79,920 15.14 mi		\$574,000	\$3,342,000
2011		Trail Maintenance and Repair	City/County	City					\$50,000/year
2011	1	North Hogback Trail Improvements	City/County	Private	Neighborhood / SRTS	6,600	\$5-\$20	\$33,000	\$132,000
2011	2	West Rio Puerco	City	Private/County	Urban	10,600	\$10-\$80	\$106,000	\$848,000
2011	3	East Rio Puerco	County	Private/City	Urban	10,600	\$10-\$80	\$106,000	\$848,000
2011	4	Aztec Avenue Bike lane, I (East)	City	City	Urban	10,600	\$10-\$80	\$106,000	\$848,000
2011	5	Stagecoach Neighborhood	City	Private	Neighborhood	2,640	\$5-\$20	\$13,200	\$52,800
TOTAL 2011						41,040 7.77 mi		\$331,200	\$2,621,800
2012		Trail Maintenance and Repair	City/County	City					\$50,000/year
2012	1	Ford Canyon Loop	City	City	Neighborhood	10,600	\$5-\$20	\$53,000	\$212,000
2012	2	Sports Complex Trail	City	City	Neighborhood	10,600	\$5-\$20	\$53,000	\$212,000
TOTAL 2012						21,200 4.02 mi		\$106,000	\$449,000
2013		Trail Maintenance and Repair	City/County	City					\$50,000/year
2013	1	Black Diamond Walking Trail, II	City	Private	Primitive	5,280	\$3 - 10	\$15,840	\$52,800
2013	2	Aztec Avenue Bike lane, II (West)	City	City	Urban	10,600	\$10-\$80	\$106,000	\$848,000
2013	3	Plateau Drive Trail	City	City	Neighborhood	13,200	\$5-\$20	\$66,000	\$264,000
TOTAL 2013						29,080 5.51 mi.		\$187,840	\$1,189,800
2014		Trail Maintenance and Repair	City/County	City					\$50,000/year
2014	1	High Desert Trail Improvements	County	Private	Primitive	137,280	\$3-\$10	\$411,840	\$1,372,800
2014	2	Mentmore Climbing Rock Trail	County	City	Open Space	10,600	\$5-\$20	\$53,000	\$212,000
2014	3	Gilbert Ortega Memorial Trail	City	City / Private	Neighborhood	8,000	\$5-\$20	\$40,000	\$160,000
TOTAL 2014						155,880 29.52 mi		\$504,840	\$1,769,800
Total 2010-2014						327,120 (52.95 miles)		\$1,703,880	\$9,372,400

Note: The total and annual sub-total Construction Cost Range do not include the maintenance cost of \$50,000/year.

E. Goal, Objectives and Policies

Goal: Develop and implement best practices in trails and open space design, use and management as an enhancement of both quality of life and local economic development

1. Promote trail usage by local residents for recreation, health and fun

- a. Celebrate and publicize trail extensions, new trail heads, improvements to open space.
- b. Organize in conjunction with schools outings onto the trails and open space.
- c. Continue to organize competitions, rallies, and other events using the trails and open space network.
- d. Promote through schools and many other means the health benefits of trails and open space recreation.

2. Support collaborative planning and partnerships to continue to build and maintain trails and open space

- a. Conduct joint planning efforts with trails and open space user groups, McKinley County, property owners, and other agencies as appropriate to support the continuing success of the current organizational model.
- b. Seek McKinley County's assistance in implementing the Trails and Open Space Element since the trails and open space system is both in and outside of the city, serves county residents as well as city residents, and benefits the county as a whole.
- c. Provide a city role in grant writing and administration in support of trails and open space capital needs.
- d. Study options for setting up a trails and open space organization, including establishing a joint powers agreement with McKinley County and other entities for acquisition, development, operations and maintenance of trails and open space areas.
- e. Schedule periodic meetings with and collaborate with the City Parks Department and Golf Course in joint planning for trails and open space.

3. Pursue funding and in-kind services

- a. Seek outside funding as appropriate.
- b. Promote collaboration in the funding and provision of in-kind services.
- c. Consider use of other local funding methods for trails and open space funding, including lodgers tax, quality of life bond issue, and impact fees.

4. Adherence to Trails and Open Space Master Plan and periodic update to the plan

- a. Adhere to principles of trail design and open space use contained in the Trails and Open Space Master Plan.
- b. Protect archeological resources by avoiding the location of trails and open spaces through or too close to such resources.
- c. Evaluate the design guidelines and update as needed.

- d. Conduct more detailed studies of the trail corridor alignments and evaluate them, making refinements and changes as considered appropriate.
 - e. Add equestrian trails to the Future Trails and Open Space System map, and develop design guidelines for such trails.
- 5. Expand the trails system in accordance with the Future Trails and Open Space System map and the priority/phasing plan**
- a. Adhere to the priority/phasing schedule to the best of the abilities of the city, county and other responsible organizations.
 - b. Pursue the priority and emphasis of Safe Routes to School, completion of prioritized missing links of sidewalks, and sidewalk repair and maintenance in order to enhance safety, provide an alternative to automobile use, and provide recreational opportunities.
 - c. Support development of the proposed equestrian trail.
- 6. Promote trails and open space as an economic development strategy**
- a. Include trails and open space offerings in economic development and tourism promotion and information for tourists, travelers, and to attract new residents to the community.
 - b. Collaborate with Adventure Gallup & Beyond to promote trails and open space as an economic development strategy.
- 7. Consider governing structures for the ongoing trails and open space coordinated program**
- a. Continue the Trails and Open Space Committee, with staff support from the city.
 - b. Implement a collaborative trails and open space organization, through working agreements with McKinley County, Adventure Gallup and Beyond, Youth Conservation Corps and other entities for the acquisition, development, operation and maintenance of trail and open space areas.
 - c. Conduct a summit of user groups, city, county, and others regarding trails and open space coordination scheduled at a time when such a discussion is timely.
 - d. Regularly report to City Council and to the Board of County Commissioners on the status of trail planning and building, open space acquisition and development, safety and maintenance.

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